

A DELAY CIRCUIT THAT SCALES WITH CLOCK CYCLE TIME

ABSTRACT OF THE DISCLOSURE

A circuit having a process, voltage, and temperature (PVT) invariant delay
5 element is disclosed. In one embodiment, the present invention includes a first and
second operational transconductance amplifier (OTA), a first and second switched
capacitor driven by a clock, and a first and second clock-controlled switch. In addition,
the present invention includes a trip inverter, a delay inverter, and a plurality of
transistors. In so coupling the first and second OTA, the first and second switched
10 capacitor, the first and second clock-controlled switch, the trip inverter, the delay
inverter, and the plurality of transistors, a circuit having a PVT invariant delay element
is provided.